CLAIMS

1. A compound of formula (I):

5 (I)

wherein:

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A represents an optionally substituted aryl, or an optionally substituted 5- or 6- membered heterocyclyl ring, or an optionally substituted bicyclic heterocyclyl group;

10 B represents a phenyl or pyridyl ring;

Z represents O, S, SO, or SO₂;

R¹ represents CO₂H, CN, CONR⁵R⁶, CH₂CO₂H, optionally substituted SO₂alkyl, SO₂NR⁵R⁶, NR⁵CONR⁵R⁶, COalkyl, 2H-tetrazol-5-yl-methyl, optionally substituted bicyclic heterocycle or optionally substituted heterocyclyl;

15 R^{2a} and R^{2b} each independently represents hydrogen, halo, optionally substituted alkyl, optionally substituted alkoxy, CN, SO₂alkyl, SR⁵, NO₂, optionally substituted aryl, CONR⁵R⁶ or optionally substituted heteroaryl;

R^x represents optionally substituted alkyl wherein 1 or 2 of the non-terminal carbon atoms are optionally substituted by a group independently selected from NR⁴, O and SO_n,

wherein n is 0, 1 or 2, optionally substituted alkenyl or optionally substituted alkynyl: or R^x represents optionally substituted CQ^aQ^bheterocyclyl, optionally substituted CQ^aQ^b-bicyclic heterocyclyl or optionally substituted CQ^aQ^b-aryl;

R⁴ represents hydrogen or an optionally substituted alkyl;

R⁵ represents hydrogen or an optionally substituted alkyl;

R⁶ represents hydrogen or optionally substituted alkyl, optionally substituted heteroaryl, optionally substituted SO₂alkyl, optionally substituted SO₂heteroaryl, CN, optionally substituted CQ^aQ^baryl, optionally substituted CQ^aQ^bheteroaryl or COR⁷;

R⁷ represents hydrogen, optionally substituted alkyl, optionally substituted heteroaryl or optionally substituted aryl;

 R^8 and R^9 each independently represents hydrogen, chloro, fluoro, CF_3 , C_{1-3} alkoxy or C_{1-3} alkyi;

Q^a and Q^b each independently selected from hydrogen and CH₃; and when A is a 6-membered ring the R¹ substituent and cyclohexene ring are attached to carbon atoms 1,2-, 1,3- or 1,4- relative to each other, and when A is a five-membered ring

or bicyclic heterocyclyl group the R¹ substituent and cyclohexene ring are attached to substitutable carbon atoms 1,2- or 1,3- relative to each other, or a derivatives thereof.

- 5 2. A compound according to claim 1 wherein A is pyridyl.
 - 3. A compound according to claim 1 or claim 2 wherein R¹ represents CO₂H.
 - 4. A compound selected from:
- 6-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
- 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 6-{2-[2-{[(4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-2-pyridinecarboxylic acid;
 6-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-2-pyridinecarboxylic acid:
- pyridinecarboxylic acid;
 6-[2-(5-(trifluoromethyl)-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2pyridinecarboxylic acid;
 6-{2-[2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}2-pyridinecarboxylic acid;
- 6-[2-(5-(trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 6-{2-[2-{[(2-chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-2-pyridinecarboxylic acid;
 6-{2-[2-{[(3,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-2-
- pyridinecarboxylic acid; 6-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-2-pyridinecarboxylic acid; 6-{2-[2-{[(4-chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-2-pyridinecarboxylic acid;
- 6-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-2-pyridinecarboxylic acid;
 6-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-2-pyridinecarboxylic acid;
 5-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-3-
- 40 pyridinecarboxylic acid; 5-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yi}-3-pyridinecarboxylic acid;

5-[2-(5-(trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3-pyridinecarboxylic acid;

- 5-{2-[2-{[(4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-3-pyridinecarboxylic acid;
- 5 5-[2-(5-(trifluoromethyl)-2-{[(2,3,4-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3-pyridinecarboxylic acid; 5-[2-(5-(trifluoromethyl)-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3-pyridinecarboxylic acid;
 - 5-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-
- 3-pyridinecarboxylic acid; 5-{2-[2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-3-pyridinecarboxylic acid;
 - 5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclohexen-1-yl}-3-pyridinecarboxylic acid;
- 6-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 6-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 6-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-
- 20 pyridinecarboxylic acid; 6-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid; 6-[2-(5-chloro-2-{[(3,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
- 6-[2-(5-chloro-2-{[(3,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 6-[2-(5-chloro-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 6-[2-(5-chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-
- pyridinecarboxylic acid; 5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclohexen-1-yl)-3-pyridinecarboxylate 5-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3pyridinecarboxylic acid; 5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3-
- pyridinecarboxylic acid;
 5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3pyridinecarboxylic acid;
 5-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3pyridinecarboxylic acid;
- 5-[2-(5-chloro-2-{[(2,3,4-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3-pyridinecarboxylic acid;
 5-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-3-pyridinecarboxylic acid;

6-(2-{5-bromo-2-[(phenylmethyl)oxy]phenyl}-1-cyclohexen-1-yl)-2-pyridinecarboxylic acid; 6-[2-(5-bromo-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;

- 6-[2-(5-bromo-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-
- 5 pyridinecarboxylic acid;
 - 6-[2-(5-bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 - 6-[2-(5-bromo-2-{[(3,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
- 6-[2-(5-bromo-2-{[(2,3,4-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 - 6-[2-(5-bromo-2-{[(2,4,5-trifluorophenyi)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;
 - 6-[2-(5-bromo-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-
- 15 pyridinecarboxylic acid;
 - 6-[2-(5-bromo-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid; and
 - 3-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclohexen-1-yl]-2-pyridinecarboxylic acid;

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and derivatives thereof.

- 5. A pharmaceutical composition comprising a compound according to any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof together with a pharmaceutical carrier and/or excipient.
- 6. A compound according to any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof for use as an active therapeutic substance.
- 7. A compound according to any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof for use in the treatment of a condition which is mediated by the action of PGE₂ at EP₁ receptors.
- 8. A method of treating a human or animal subject suffering from a condition which is mediated by the action of PGE₂ at EP₁ receptors which comprises administering to said subject an effective amount of a compound according to any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof.
- 9. A method of treating a human or animal subject suffering from a pain,
 40 inflammatory, immunological, bone, neurodegenerative or renal disorder, which method
 comprises administering to said subject an effective amount of a compound according to
 any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof.

10. A method of treating a human or animal subject suffering from inflammatory pain, neuropathic pain or visceral pain which method comprises administering to said subject an effective amount of a compound according to any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof.

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- 11. Use of a compound according to any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof for the manufacture of a medicament for the treatment of a condition which is mediated by the action of PGE₂ at EP₁ receptors.
- 12. Use of a compound according to any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof for the manufacture of a medicament for the treatment or prevention of a condition such as a pain, inflammatory, immunological, bone, neurodegenerative or renal disorder.
- 13. Use of a compound according to any one of claims 1 to 4 or a pharmaceutically acceptable derivative thereof for the manufacture of a medicament for the treatment or prevention of a condition such as inflammatory pain, neuropathic pain or visceral pain.